

performing distance correction processing, in which during scan-exposing of the recording medium, the light source is moved toward and away from the recording medium synchronously with the movement of the light source by the light source scanning apparatus based on the distance correction data.

2 (Amended). The method for controlling exposure of claim 1, the method further comprising:

Obtaining light-emission correction data which is generated by measuring a position irradiated with the light beam emitted from the light source onto the recording medium while the light source is being moved by the light source scanning apparatus; and

performing light-emission correction processing, wherein, during scan-exposing of the recording medium, light-emission of the light source is controlled synchronously with the movement of the light source by the light source scanning apparatus based on the light-emission correction data.

3 (Amended). The method for controlling exposure of claim 1, wherein the distance correction processing comprises the steps of:

- a) initiating movement of the light source by the light source scanning apparatus;
- b) reading the distance correction data for one step immediately before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus;

a<sup>1</sup>  
(concl.)  
c) identifying that the light source has reached a distance at which the movement for exposure for the one step is initiated;

d) carrying out the movement for exposure for the one step of the light source by the light source scanning apparatus, and repeating the steps b), c) and d); and

e) returning the light source to the position where the scan-exposure initiated, when the light source has reached a position at which the exposure of the recording medium is completed.

---

5 (Amended). The method for controlling exposure of claim 2, wherein the light-emission correction processing comprises the steps of:

a<sup>2</sup>  
a) initiating movement of the light source by the light source scanning apparatus;  
b) reading the light-emission correction data for one step immediately before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus;

c) setting light-emission initiating timing on the basis of the light-emission correction data which has been read;

d) identifying that the light source has reached a position at which the movement for exposure for the one step is initiated;

e) carrying out the light-emission of the light source at the light-emission initiating timing which has been set, and repeating the steps b), c), d) and e); and

f) returning the light source to the position at which the scan-exposure initiated, when the light source has reached a position at which the exposure for the recording medium is completed.

---

a<sup>3</sup>  
7 (Amended). A method for controlling exposure, wherein a recording medium is irradiated with a light beam emitted from a light source which is moved along one of main scanning and sub-scanning directions by a light source scanning apparatus, the recording medium being moved along the other of the main scanning and the sub-scanning directions, to scan-expose the recording medium, the method comprising:

obtaining light-emission correction data which is generated by measuring a position irradiated with the light beam emitted from the light source onto the recording medium while the light source is being moved by the light source scanning apparatus; and

performing light-emission correction processing, wherein, during scan-exposing of the recording medium, light-emission of the light source is controlled synchronously with the movement of the light source by the light source scanning apparatus based on the light-emission correction data.

8 (Amended). The method for controlling exposure of claim 7, the method further comprising:

obtaining distance correction data which is generated by measuring distance between the recording medium and the light source while the light source is being moved by the light source scanning apparatus; and

performing distance correction processing, wherein, during scan-exposing of the recording medium, the light source is moved toward and away from the recording medium synchronously with the movement of the light source by the light source scanning apparatus based on the distance correction data.

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Appln. No. 09/917,880

9 (Amended). The method for controlling exposure of claim 7, wherein the light-emission correction processing comprises the steps of:

- 23*  
*(Contd)*
- a) initiating movement of the light source by the light source scanning apparatus;
  - b) reading the light-emission correction data for one step immediately before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus;
  - c) setting light-emission initiating timing on the basis of the light-emission correction data which has been read;
  - d) identifying that the light source has reached a position at which the movement for exposure for the one step is initiated;
  - e) carrying out the light-emission of the light source at the light-emission initiating timing which has been set, and repeating the steps b), c), d) and e); and
  - f) returning the light source to the position at which the scan-exposure initiated, when the
- 2 light source has reached a position at which the exposure for the recording medium is completed.
- 

*24*

11 (Amended). The method for controlling exposure of claim 4, wherein the distance correction processing comprises the steps of:

- a) initiating movement of the light source by the light source scanning apparatus;
- b) reading the distance correction data for one step immediately before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus;

at (concl.)  
c) identifying that the light source has reached a distance at which the movement for exposure for the one step is initiated;

d) carrying out the movement for exposure for the one step of the light source by the light source scanning apparatus, and repeating the steps b), c) and d); and

e) returning the light source to the position where the scan-exposure initiated, when the light source has reached a position at which the exposure of the recording medium is completed.

---

**Claims 18 and 19 are added as new claims.**

---

18. The method for controlling exposure of claim 1, wherein the distance correction processing comprises the steps of:

05  
a) initiating movement of the light source by the light source scanning apparatus;  
b) reading the distance correction data for one step before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus; and

c) carrying out the movement for exposure for the one step of the light source by the light source scanning apparatus, and repeating the steps b) and c).

19. The method for controlling exposure of claim 7, wherein the light-emission correction processing comprises the steps of:

a) initiating movement of the light source by the light source scanning apparatus;

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Appln. No. 09/917,880

as  
(Concl)

b) reading the light-emission correction data for one step before exposure, the one step being a predetermined amount by which the light source is moved for exposure by the light source scanning apparatus;

c) setting light-emission initiating timing on the basis of the light-emission correction data which has been read; and

d) carrying out the light-emission of the light source at the light-emission initiating timing which has been set, and repeating the steps b), c) and d).

---